

Attachment 1



REPORT 7 - Products offered in AZ

IMA EDI Disclosure	Document Description	Exists in SATE 70	Exists in SATE 80	Required Product in Arizona	Tested by HP
AAQ - AAR	Appointment Availability	Yes	Yes	Yes	Yes
ANLG	Unbundled Analog (ANA) Line-Side Switch Port	No	No	No	No
ASQ - ASR	Appointment Reservation	Yes	Yes	Yes	Yes
AVQ - AVR	Address Validation by Address	Yes	Yes	Yes	Yes
AVQ - AVR	Address Validation by TN	Yes	Yes	Yes	Yes
C21	Centrex 21	No	No	No	No
C21	Centrex 21 Resale Services	No	No	No	No
CEX	Centrex Plus/Centron Services	Yes	Yes	No	Yes
CFAQ - CFAR	Connecting Facility Assignment	Yes	Yes	Yes	Yes
COMP	Completion	Yes	Yes	Yes	Yes
CSRQ - CSRR	Customer Service Record via EDI	Yes	Yes	Yes	Yes
CSRQ - CSRR	Customer Service Record via FTP or Email	No	No	Yes	No
CTQ-CTR	TN/Appt Cancellation	No	No	Yes	No
DGTL	Unbundled Digital Line-Side Switch Port	No	No	No	No
DIOT	DID in Only Trunk	No	No	No	No
DL	Directory Listing - Simple	No	No	No	No
DL	Directory Listings Only	Yes	No	Yes	Yes
DLRQ - DLRR	Design Layout Request	No	No	Yes	No
DTR	Design Trunk	No	No	No	No

IMA EDI Disclosure	Document Description	Exists in SATE 70	Exists in SATE 80	Required Product in Arizona	Tested by HP
DTR	Design Trunk Resale	No	No	No	No
EEL	EEL/UNE Combination	No	No	No	No
FA	Functional Ack	Yes	Yes	Yes	Yes
FAQ - FAR	Facility Availability Convert POTS to Unbundled Loop	Yes	Yes	Yes	Yes
FAQ - FAR	Facility Availability ISDN Capable Loop	No	No	Yes	No
FAQ - FAR	Facility Availability POTS Facility Availability	Yes	Yes	Yes	Yes
FAQ - FAR	Facility Availability Unbundled ADSL	Yes	Yes	Yes	Yes
FATAL	Fatal Error Response	Yes	Yes	Yes	Yes
FBDL	Facility Based Directory Listings	No	No	No	No
FOC	Firm Order Confirmation	Yes	Yes	Yes	Yes
INP	Interim Number Portability	No	No	No	No
ISDN	Resale BRI ISDN Order Submittal	No	No	No	No
ISPF	PRI ISDN Facility	No	No	No	No
ISPT	PRI ISDN Trunks	No	No	No	No
JEOP	Jeopardy	Yes	Yes	Yes	Yes
LO	Directory Listings Only	No	Yes	Yes	Yes
LS	Unbundled Loop	Yes	Yes	Yes	Yes
LSNP	Unbundled Loop w/ NP	Yes	Yes	Yes	Yes
LSRSQ - LSRSR	Service Order Status Inquiry Transaction	No	No	No	No
LSRSQ - LSRSR	Service Request Status Inquiry	No	No	No	No
MPQ-MPR	Meet Point	Yes	Yes	Yes	Yes
MR	Megabit	No	No	No	No

IMA EDI Disclosure	Document Description	Exists in SATE 70	Exists in SATE 80	Required Product in Arizona	Tested by HP
NF	Non-Fatal Error Response Transaction	No	No	Yes	No
NF	Non-Fatal Response	No	No	Yes	No
NP	Local Number Portability	Yes	Yes	Yes	Yes
PAL	Public Access Line	No	No	No	No
PALC	Public Access Line	No	No	No	No
PALPSP	Public Access Line - PSP	No	No	No	No
PBX	PBX	No	No	No	No
PL	Resale Private Line Order Submittal	No	No	No	No
POTS	POTS Resale Order	Yes	Yes	Yes	Yes
PSP	Public Access Line - PSP	No	No	No	No
QDSL	Qwest DSL	No	No	No	No
RFR	Resale Frame Relay	No	No	No	No
RLDQ-RLDR	Raw Loop	Yes	Yes	No	Yes
SAQ - SAR	Service Availability	Yes	Yes	Yes	Yes
SL	Shared Loop	Yes	Yes	Yes	Yes
SU	Status Change Inquiry	Yes	No	Yes	Yes
SU	Status Updates – Auto Push	No	Yes	Yes	Yes
TNAQ - TNAR	Telephone Number Availability	Yes	Yes	Yes	Yes
TNSQ - TNSR	Telephone Number Availability	Yes	Yes	Yes	Yes
UADT	Unbundled Analog	No	No	No	No
UADT	Unbundled Analog DID/PBX Trunk	No	No	No	No
UCEX	UNE-P Centrex Plus and Centron	No	Yes	No	Yes
UCX	UNE-P Centrex Plus and Centron	Yes	No	No	Yes

IMA EDI Disclosure	Document Description	Exists in SATE 70	Exists in SATE 80	Required Product in Arizona	Tested by HP
UCX21	UNE P Centrex 21	No	No	No	No
UCX21	UNE-P Centrex 21	No	No	No	No
UDL	Unbundled Distribution Loop	Yes	Yes	No	Yes
UDLNP	Unbundled Distribution Loop w/ NP	Yes	Yes	No	Yes
UDSF	UNE-P DSS FACILITY	No	No	No	No
UDST	UNE-P DSS TRUNK	No	No	No	No
UDTF	DS1 DID PBX Trunk Port Facility	No	No	No	No
UDTR	DS1 DID PBX Trunks	No	No	No	No
UFL	Unbundled Feeder Loop	No	No	No	No
UNEC	UNE-C PL/EEL	No	No	No	No
UNEIB	UNE-P BRI ISDN	No	No	No	No
UNEP	UNE-P POTS	Yes	Yes	Yes	Yes
UPDET	UNE-P PBX DESIGN TRUNK	No	No	No	No
UPDIT	UNE-P PBX DID IN ONLY TRUNK	No	No	No	No
UPIF	UNE-P PRI ISDN FACILITY	No	No	No	No
UPIT	UNE-P PRI ISDN TRUNK	No	No	No	No

IMA EDI Disclosure	Document Description	Exists in SATE 70	Exists in SATE 80	Required Product in Arizona	Tested by HP
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	Total Count of Functionality in the IMS EDI Disclosure			80	
	Total Count of Capability in SATE			34	
	Total Count of Capability not in SATE			46	
	Percent Capability not in SATE			57.50%	
	Total Count of Capability Used by CLECs in Arizona			34	
	Total Count of Capability Used by CLECS not in SATE			6	
	Total Count of Capability tested by HP			34	
	Total Count of Capability not tested by HP			0	

Attachment 2

Pre-Order Transaction	Total BPL Errors (SATE and Production)	Total Production Legacy System Errors	Total SATE- coded Legacy System Errors	Percentage of Production Errors Available in SATE
Appointment Availability Query	27	4	0	87.10%
Appointment Selection "Query	14	3	0	82.35%
Address Validation Query	30	19	3	67.35%
Connectin Facility Assignment Query	15	10	3	72.00%
CSR Retrival	54	39	3	61.29%
Facility Availability Query	57	37	6	67.02%
Loop Qualification Query	47	6	2	92.45%
Meet Point Query	27	3	1	93.33%
Raw Loop Data Query	40	0	0	100.00%
Service Availability Query	11	0	0	100.00%
Telephone Number Availability Query	53	13	0	80.30%
Telephone Number Selection Query	16	0	0	100.00%
Total	391	134	18	77.90%

**Total % Legacy system error
codes in SATE *** **13.43%**

*Note: This includes Legacy system errors encountered by CLECs in the past six months.

Attachment 3

To: Bill Difference Distribution Group
From: Catriona Dowling
Date: July 11, 2002
Subject: BOS Version 37 Differences List – **UNE-P**

Attached is the updated BOS Version 37 Bill Differences List for QWEST. BOS Version 37 was installed into IABS production with release 83 on Apr 27, 2002. **This update refers to BDT output for Unbundled Products (UNE-P) only.**

Availability for producing specified UNE-P accounts in the CABS/BOS BDT format through the IABS system was implemented 7/1/02.

IABS is formatting the CABS/BOS BDT records for UNE-P products from bill/CSR data that is created by the system (CRIS) that currently produces the Unbundled Bills and CSR's. As a result, data may be unavailable for IABS to accurately populate all values on the BDT records. The following details some of the known data limitations:

In the case where an account (Telephone Number (TN)) has been disconnected, no CSR data will be available but there may be bill data. Therefore, the BDT file may contain Bill records (10-xx-xx) with no corresponding CSR records (40-xx-xx).

Re. CSR SERVICES AND FEATURES LEFT HAND FID DATA (40-15-05-00):

- The Circuit (CLS, CLT) is not provided as a left-handed FID on the CSR and as a result will not be produced on a 40-15-05 record. The circuit will be included in the FID data on the 40-15-10-00 record. However, the TN will be presented as a left-handed FID on the 40-15-05 record.

Re. Edits

- Standard BOS edits will not be performed since IABS is simply formatting the BOS BDT records. The data necessary to perform the edits is not available.

Please refer to the attachments.

If you have any further questions, please call me at (303) 624-0528.

Thank you,
Catriona

Attachments

IABS BOS DIFFERENCES LIST

Page 2 of 4

Company Name: QWEST
BOS Version 37.0
Reason for Issue: BOS 37 Update due to BOS Format of Unbundled Products

IABS Release: 84.01
Implementation Date: 07/01/02
Issue Date: 07/11/02
Previous Issue Date: 05/31/02

Part 1 - Record Space Differences

Record Name	Record ID	Record Positions	Status	Standard Version	Explanation of Difference	Item Impl Date

**Note: This difference was not accepted by the TRG and will be removed.*

*Key to Status Codes: N = new difference, C = change to existing difference, 1 = tariff/regulatory requirements, 2 = temporary assignment from BCR
 3 = standard not implemented, 4 = deviation made standard, 5 = miscellaneous, see explanation of difference*

IABS BOS DIFFERENCES LIST

Page 3 of 4

Company Name: QWEST
 BOS Version 37.0
 Reason for Issue: BOS 37 Update due to BOS Format of Unbundled Products

IABS Release: 84.01
 Implementation Date: 07/01/02
 Issue Date: 07/11/02
 Previous Issue Date: 05/31/02

Part 2 - Redefinition/Additional Values/Code Sets for Existing Data Elements

Data Element Name	Status	Standard	Explanation of Difference	Item Impl Date
Activity Date	5		Bill Processing Date will be populated in Activity Date	07/01/02
Adjustment Thru Date	5		Will contain the effective date of the Adjustment	07/01/02
Circuit Format Ind	5		Will contain spaces	07/01/02
Recurring/Non-recurring Charge Ind	5		Will always contain a value of '1'	07/01/02
Service Established Date	5		Bill Processing Date will be populated in Service Established Date field.	07/01/02
Total Taxes	5		Will include Surcharges when present	07/01/02
USOC/FID Ind	5		Will always contain the value of "2", indicating USOC. FID information is not available from the originating system.	07/01/02
Unbundled Usage Rate	5	V40	Redefined data characteristics from SV9(9) to S9(2)V9(7) in order to accommodate whole numbers.	07/01/02

*Note: This difference was not accepted by the TRG and will be removed.

Key to Status Codes: N = new difference, C = change to existing difference, 1 = tariff/regulatory requirements, 2 = temporary assignment from BCR
 3 = standard not implemented, 4 = deviation made standard, 5 = miscellaneous, see explanation of difference

IABS BOS DIFFERENCES LIST

Page 4 of 4

Company Name: QWEST
BOS Version 37.0
Reason for Issue: BOS 37 Update due to BOS Format of Unbundled Products

IABS Release: 84.01
Implementation Date: 07/01/02
Issue Date: 07/11/02
Previous Issue Date: 05/31/02

Part 3 - New and Local Use Phrase Codes

Phrase Code	Phrase	Status	Standard Version	Explanation of Difference	Item Implementation Date
X15	Charge for Unbundled Services	5		Local Use Phrase for Unbundled products' OC&C's	07/01/02
X18	Adjustment for Unbundled Services	5		Local Use Phrase for Unbundled Products' Adjustments	07/01/02

Attachment 4

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO
DOCKET NO. 99A-577T

**IN THE MATTER OF QWEST CORPORATION'S STATEMENT OF GENERALLY
AVAILABLE TERMS AND CONDITIONS**

REBUTTAL AND CROSS ANSWER TESTIMONY OF ROBERT BRIGHAM
QWEST CORPORATION

July 20, 2001

LSR flow through - March 9, 2001

Significant effort has been directed to decreasing the manual handling of competitive local exchange carrier (CLEC) orders.

IMA releases 6.0 (December 2000), release 6.01 (February 2001), release 7.0 (April 2001), release 7.01 (June 2001) and release 8.0 (August 2001) in conjunction with FTS have made (will make) improvements in CLEC order flow through.

While the actual performance of the IMA flow through enhancements may take some time to achieve maximum efficiency, the 271 Benchmarks for OSS testing are being set at a relatively high level. IMA release 7.0 has been selected for testing. For 4 of the wholesale products for which Qwest is establishing SGAT pricing, the Benchmarks have been set as follows: 1) resale POTS = retail parity for POTS order flow through, 2) UNE-P = retail parity for POTS order flow through, 3) unbundled loop = 85% flow through and 4) shared loop = 85% flow through.

The actual experience of Qwest retail flow through ranges from 94.31% to 96.04%, therefore it is reasonable to use a 95% flow through rate where the benchmark is retail parity.

Since these system enhancements are intended to reduce the ISC manual handling of CLEC LSR to the reciprocal of the benchmark, it is reasonable to reflect the benchmark flow through rates in the development of the UNE ordering costs in the Qwest SGAT pricing of the affected products.

The following sections are examples of the business requirements that are being met with the system enhancements.

TAB A

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)

Qwest Communications International Inc.,)
Consolidated Application for Authority to Provide)
In-Region, InterLATA Services in Colorado, Idaho,)
Iowa, Nebraska and North Dakota)

WC Docket No. 02-148

**REPLY DECLARATION OF THOMAS H. WEISS
ON BEHALF OF AT&T CORP.**

I. BACKGROUND AND QUALIFICATIONS.

1. My name is Thomas H. Weiss. I am the same Thomas H. Weiss who filed a declaration with AT&T's initial comments. In that testimony, I demonstrated that Qwest's Colorado non-recurring cost study contained numerous clear TELRIC errors that substantially overstate Qwest's Colorado non-recurring costs.

2. As part of that testimony, I showed that Qwest's Colorado "basic loop installation" rate (\$55) is substantially overstated by numerous clear TELRIC errors. One of those errors is that the basic loop installation NRC includes both an installation charge and a disconnect charge. As I demonstrated in my initial testimony, a TELRIC compliant rate structure would recover disconnect costs at the time of the disconnect, which may be months or years after initial installation. Thus, Qwest improperly recovers disconnect costs at the time of installation, and Qwest overcharges CLECs for both the installation and for the disconnect.

3. The purpose of my reply declaration is to demonstrate that Qwest's admission that it often maintains a "warm dial tone," rather than fully disconnecting lines, confirms that Qwest's basic installation and disconnect charges – which are both recovered up-front by Qwest in its basic loop installation charge – are inflated above TELRIC levels. The cost to "disconnect" an existing line to warm dial tone status is substantially less than the cost of a full disconnect.¹ Likewise, the cost of "installing" (i.e., reactivating) a warm dial tone line is substantially lower than the costs of a full installation of a line; reactivating a warm dial tone line merely involves a switch program entry and changing the plant records from "warm dial tone" status to "active" status. Yet, Qwest's cost studies do not reflect these lower costs. On the contrary, my review of Qwest's Colorado non-recurring cost studies confirms that Qwest's basic loop installation charges reflect the costs of a full installation and a full disconnect, and does not reflect the use of any warm dial tone lines.

4. Attached to this declaration is an eight-page exhibit that shows the portions of Qwest's Colorado non-recurring cost study that pertain to two forms of a basic loop installation. There are two general sections to the exhibit: pages 1-4 (lines 1-106) show the activities that Qwest has associated with installing (lines 1-76) and disconnecting (line 77-106) a loop for a CLEC, *with testing*, and coordinated with the CLEC. Pages 5-8 (lines 107-184) show the activities that Qwest has associated with installing (lines 107-155) and disconnecting (lines 156-

¹ As I explained at Paragraph 14 of my initial declaration filed on July 2, 2002, under the "warm dial tone" dedicated plant arrangement, when a customer orders Qwest loop service to be discontinued, no physical "disconnection" takes place and no premises visit is undertaken; the status of the line is merely changed at the switch and in the plant records from "active" status to "warm dial tone" status.

184) a loop for a CLEC, *without testing*, but coordinated with the CLEC.² As demonstrated below, these portions of Qwest's nonrecurring cost study confirm that, when computing installation and disconnection costs, Qwest does not account for use in its network of warm dial tone.

5. *Installation.* None of the line items in the installation portion of Qwest's Colorado nonrecurring cost study accounts for the existence of a warm dial tone. Nor does Qwest appear to have adjusted the probability of particular tasks that would not have to be performed where warm dial tone is involved in a loop installation and/or removal. Rather, Qwest's probability adjustments (shaded entries in Column A of the exhibit) account only for (1) orders that are received by fax; (2) orders received electronically; (3) orders involving changes to directory advertising; and (4) orders that will fall out of the Operations Support Systems.

6. In fact, there are several tasks listed in the installation portion of Qwest's cost study that certainly would not be performed for loops that involve warm dial tone. For example, none of the "Central Office Frames" work depicted at lines 44 through 52 and at lines 145 through 148 of the exhibit is necessary in order to complete a loop coordinated install with and without testing, respectively, under a warm dial tone arrangement. Since warm dial tone installations involve loop administrative record changes and only minor switch programming work, no changes are necessary at the central office frames. Similarly, because no physical activity is performed in the field under a warm dial tone arrangement, none of the "Installation/Field Technician" work shown at lines 58 through 68 and at lines 158 through 164

² While the exhibit shows the activities that Qwest claims are necessary to complete "hot loop" connections and disconnections, Qwest claims that those same basic activities apply to basic loop installations as well – e.g., the basic loop install addressed at Paragraph 42 of my initial declaration in this docket.

of the exhibit is necessary in order to complete a loop coordinated install with and without testing, respectively. Other types of work that are claimed by Qwest to be necessary for installations (including warm dial tone installations) but that would not be performed under a warm dial tone arrangement include work suggested by Qwest for the "Load Resource Administration Center" (LRAC),³ the "Loop Provisioning Center" (LPC),⁴ "Design" activity, and so on.

7. Thus, given Qwest's admission that at least some portion of its lines are serviced by a warm dial tone – and, therefore, will not require all of the activities associated with a full installation – there is no question that the installation portion of Qwest's basic loop install nonrecurring charge is overstated.

8. *Disconnect.* The second part of the Qwest's basic loop install is the disconnect charge. Lines 77 through 106 and lines 156 through 184 of the attached exhibit show the activities that Qwest associates with disconnections of coordinated loop installations, with and without testing, respectively. Nowhere in these Qwest disconnection cost calculations is the probability of warm dial tone loops reflected. Rather, the probability adjustments in Qwest's non-recurring cost study for disconnects reflect only (1) orders received by fax;⁵ (2) orders receive electronically;⁶ and (3) orders that fall out of OSS.⁷

³ The LRAC administers and schedules the activities of central office and field personnel in connection with loop installations.

⁴ The LPC administers manual assistance required when Local Service Requests (LSRs) "fall-out" of the Operation Support Systems – fallout would not occur for warm dial tone arrangements.

⁵ For example, see lines 77 and 156.

⁶ For example, see lines 78 and 157.

9. In fact, except for some Interconnect Service Center activity, virtually all of the several tasks listed in the disconnect portion of Qwest's NRC cost analyses would not be performed during a warm dial tone disconnect. As noted above and in my initial declaration, only very minor switch programming activity and administrative record changes are required to effect a warm dial tone connection and/or disconnection; since no field activity would be undertaken in the case of a warm dial tone arrangement, no LPC, Design or CO Frame work would be performed or even be necessary.

10. Thus, given Qwest's admission that at least some portion of its lines are serviced by a warm dial tone – and, therefore, will not require all of the activities associated with a full installation – there is no question that the installation portion of Qwest's basic loop disconnection charge is overstated.

II. CONCLUSION

11. For the foregoing reasons, Qwest's admission that its Colorado network uses warm dial tones confirms that Qwest's Colorado basic loop install NRC is substantially overstated.

⁷ For example, see lines 79 and 158.

VERIFICATION PAGE

I declare under penalty of perjury that the foregoing Declaration is true and correct.

/s/ Thomas Weiss

Thomas Weiss

Executed on: July 29, 2002

REDACTED FOR PUBLIC INSPECTION

TAB B

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)

Qwest Communications International Inc.,)
Consolidated Application for Authority to Provide)
In-Region, InterLATA Services in Colorado, Idaho,)
Iowa, Nebraska and North Dakota)

WC Docket No. 02-148

**JOINT REPLY DECLARATION OF DEAN FASSETT AND ROBERT MERCER
ON BEHALF OF AT&T CORP.**

I. BACKGROUND AND QUALIFICATIONS.

1. **Dean Fasset.** I am the same Dean Fasset who filed a declaration with AT&T Corp.'s ("AT&T's") initial comments in this proceeding.

2. **Robert Mercer.** I am the same Robert Mercer who filed a declaration with AT&T Corp.'s ("AT&T's") initial comments in this proceeding.

3. We demonstrated in our initial declaration that Qwest's Colorado loop rates are substantially inflated by myriad clear TELRIC errors. The purpose of this reply declaration is to respond to the discussion in the Evaluation of the Colorado Public Utilities Commission ("CPUC Eval.") relating to the loop rate deaveraging in Colorado. In particular, the CPUC claims that it has implemented a reasonable "interim" three zone deaveraging methodology. CPUC Eval. at 31. In reality, the same clear TELRIC errors that inflate Qwest's UNE loop rates also

substantially distort the deaveraging process, which further deters competitive entry into Colorado's local telephone markets.

4. To fully understand this problem, it is necessary to understand how the CPUC currently allocates wire centers to UNE zones. The deaveraging process involves the following steps. First, the HAI Model is run with the wire center cost option¹ to produce a total loop cost for each wire center. Second, the wire centers are listed in the order of the loop costs produced by the HAI Model, with the lowest-cost wire center listed first. Third, an optimizing program developed by AT&T and adopted by the CPUC organizes the wire centers into three² zones of similar costs. It does so by minimizing the total deviation of individual wire center costs from the mean within each zone. For instance, if there were five wire centers, A, B, C, D, and E, with loop costs of, respectively, \$5.00, \$6.50, \$11.00, \$13.00, and \$28.00, the optimizer would recognize wire centers A and B as having similar costs, C and D as having similar costs, and E differing substantially from the others and therefore belonging to a group of its own. The program would therefore organize the wire centers into those three zones. Thus, the assignment of wire centers to UNE zones is directly linked to the HAI model's loop rate calculations.

5. As noted above, we demonstrated in our initial declaration that, although the CPUC correctly adopted the HAI cost model to calculate Qwest's Colorado UNE loop rates, the CPUC improperly changed several critical inputs to the HAI cost model, resulting in substantially overstated loop rates. As we demonstrate below, those input changes also distorted the deaveraging process in a way that deters local entry. Specifically, we show that by

¹ The HAI Model can produce results by line density zones, wire centers, CBGs, or individual customer cluster, as selected by the user.

computing rates without the strand distance normalization ("SDN") option turned on in the model (discussed in our initial comments at ¶ 16), the CPUC substantially distorts the results of the deaveraging process.³

6. Table 1 (below) shows the UNE zones, and loop rates within each zone based on the HAI cost model with all of the (non-TELRIC) inputs adopted by the Colorado PUC, except that the SDN module was turned on. The distribution of rates and UNE zones produced by the HAI model when the SDN module is turned on is consistent with the Colorado demographics, as the first zone generally consists of wire centers serving the densely populated Denver metropolitan area, the second zone generally consists of wire centers serving the population concentration along the "front range" (the area of Colorado within 15 miles or so of the eastern edge of the Rocky Mountains where the large majority of Colorado residents are located), and the third zone consists of the wire centers serving the remainder of the state.

Table 1. UNE Zones And Rates With SDN Turned On.

Band	Average Loop Cost	No. of WCs	No. of Lines	Percent of Total Lines	Residence Lines	Business Lines
Band 1	\$10.07	35	1,810,911	59.4%	1,053,888	615,749
Band 2	\$14.75	34	782,103	25.6%	519,916	231,250
Band 3	\$34.59	97	456,597	15.0%	320,153	113,558
Average	\$14.92					

7. By turning off the SDN module, the CPUC dramatically distorted these results. Table 2 (below) shows the distribution of lines to UNE zones and the corresponding loop rates in each zone produced by the HAI model when the non-TELRIC inputs adopted by CPUC are used,

² The optimizing program allows the user to specify three or more groups into which the wire centers are to be organized; the CPUC determined three was the appropriate number to use.

³ Strand distance normalization (SDN) ensures the distribution route distance calculated by the model in a given serving area matches an independently-calculated amount of distribution route distance required to connect the actual customer locations in that serving area.

and the SDN module is turned off. The non-TELRIC inputs adopted by the CPUC result in very low zone 1 loop costs, but there are fewer than 5.7% of the lines in that zone (compared to over 60% of lines in zone 1 when TELRIC-compliant inputs are used in the HAI model). That means that most of the lines for which potential new entrants will compete are in zones 2 and 3, which now have substantially higher loop rates than result when TELRIC-compliant inputs are used to compute UNE loop rates. Compare Table 2 (average loop costs in zones 2 and 3) to Table 1 (average loop rates in zones 2 and 3).

Table 2. UNE Zones And Rates With CPUC-Ordered Inputs (Including SDN Turned Off).

Band	Average Loop Cost	No. of WCs	No. of Lines	Percent of Total Lines	Residence Lines	Business Lines
Band 1	\$5.91	4	173,554	5.7%	40,109	98,109
Band 2	\$12.31	50	2,290,948	75.1%	1,443,803	702,339
Band 3	\$32.74	112	585,109	19.2%	410,045	145,073
Average	\$15.85					

8. The results in Table 2 are not even remotely consistent with Colorado's demographics. Now, only four wire centers in the central business district of Denver belong to Zone 1, while all remaining wire centers that previously had costs similar to these four have now been thrown into the second Zone with a substantially higher average cost.

9. There is no question that the clear TELRIC errors that result in this distorted allocation of wire centers to UNE zones deters local entry in Colorado. That fact is illustrated by comparing the average cost per loop that would be incurred by a new entrant that seeks to serve customers in zone 1. Looking at Table 1, there are 1,810,911 lines in the lowest zone, at \$10.07 per line, when the Colorado PUCs inputs are used, except that the SDN module is turned on. However, when the SDN module is turned off, those lines are split between zones 1 and 2, with 173,554 lines falling in the lowest zone (priced at \$5.91) and the remaining 1,637,357 falling in

the second zone (priced at \$12.31). The weighted average cost of those lines is \$11.70. Thus, the non-TELRIC inputs for the HAI model adopted by CPUC overstate the average cost of service for these customers by at least \$1.63 per line per month (\$11.70 minus \$10.07).

10. The impact of the TELRIC errors on residential competition is even more dramatic. As shown in Table 1, when the SDN is turned on, as it should be, the HAI results and optimization routine result in 1,053,888 residential lines in zone 1, with a UNE loop rate of \$10.07. The CPUC's non-TELRIC decision to turn SDN off, however, moves the vast majority of those residential lines from zone 1 to zone 2 – indeed, there are only 40,109 residential lines in zone 1 under the CPUC's approach. Thus, according to the CPUC's non-TELRIC methodology, new residential entrants would pay an average UNE rate of \$12.17 to serve those same customers. That overstates TELRIC-compliant residential UNE rates for those customers by \$2.10 (\$12.17 minus \$10.07).

11. The bottom line is this: The non-TELIRC-compliant inputs adopted by the CPUC to develop UNE-loop rates deter competitive entry in two critical respects. First, as demonstrated in our initial declaration, those TELRIC errors substantially overstate UNE loop rates generally. Second, as demonstrated above, those same non-TELRIC errors dramatically distort the UNE loop deaveraging process in a way that further deters competitive entry.

II. CONCLUSION

12. For the foregoing reasons, the TELRIC errors that inflate Qwest's Colorado UNE loop rates also distort the deaveraging process.

VERIFICATION PAGE

I declare under penalty of perjury that the foregoing Declaration is true and correct.

/s/ Dean Fasset

Dean Fasset

Executed on: July 29, 2002

VERIFICATION PAGE

I declare under penalty of perjury that the foregoing Declaration is true and correct.

/s/ Robert Mercer

Robert Mercer

Executed on: July 29, 2002

TAB C

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Qwest Communications International Inc.,)	
Consolidated Application for Authority to)	
Provide In-Region, InterLATA Services in)	WC Docket No. 02-148
Colorado, Idaho, Iowa, Nebraska and North)	
Dakota)	
)	

**REPLY DECLARATION OF MICHAEL LIEBERMAN
ON BEHALF OF AT&T CORP.**

1. My name is Michael Lieberman. I am the same Michael Lieberman who filed a declaration with AT&T's opening comments. In that declaration I demonstrated that Qwest's attempt to satisfy its burden of proving that its recurring rates in Iowa, Nebraska and North Dakota are TELRIC-compliant by benchmarking those rates to Colorado must be rejected, because Qwest's benchmarking approach is fundamentally flawed. I also demonstrated that Qwest's UNE rates in Idaho, Iowa and North Dakota create a price-squeeze that precludes economically feasible competitive entry in those states.

2. The purpose of my reply declaration is to respond to Qwest's baseless attacks on my analysis, and to show that Qwest's proposed alternative analysis is fundamentally flawed. I also address Qwest's claims that the HAI cost model does not already reflect the costs of vertical features and vertical feature upgrades. I am in a unique position to discuss that issue because I worked closely with this Commission to develop the switching data used in the HAI model. The remaining portions of my testimony are organized as follows.

3. Part I addresses Qwest's benchmarking analysis. Qwest recently conceded that its initial benchmarking analysis is flawed. However, Qwest has refused to address all of the problems with that analysis. Instead, Qwest is attempting to manipulate the results of the benchmarking analysis by shifting rate elements to different categories. But that shell game does not change the fact that those costs still exist, and cannot be ignored in a benchmarking analysis simply because Qwest has unilaterally placed those costs in a different category. Qwest is also playing games with the minutes of use assumptions used in its benchmarking analysis. As detailed below, there is no question that a proper benchmarking analysis should account for state-specific minutes of use, even if the allocation of those minutes to inter- and intra-office categories must be estimated. Qwest's claim that it is better to compare rates in different states based on the national average number of minutes does not withstand scrutiny, and is analytically indefensible.

4. Part II addresses Qwest's baseless criticisms of the residential margin analysis showing that local entry is not economically feasible for Idaho, Iowa and North Dakota. I also show that the residential margin analysis supported by Qwest is fundamentally flawed and cannot be relied upon. As one example, it appears that Qwest's *residential* margin analysis relies on the Commission's benchmark minutes of use volumes, which reflect a combined *residential plus business* minutes of use assumptions. Because, on a per line basis, business toll-related minutes far exceed residential toll-related minutes, Qwest's analysis substantially overstates the access revenues available to new entrants in Idaho, Iowa and North Dakota.

5. Part III addresses Qwest's claims that its past accounting practices show that the HAI model does not account for the costs of vertical features software or vertical features software upgrades. As I explain below, Qwest's claims do not withstand scrutiny.

I. QWEST'S RECURRING RATES IN IOWA, NEBRASKA AND NORTH DAKOTA DO NOT PASS THE COMMISSION'S BENCHMARKING ANALYSIS.

6. Qwest's seeks Section 271 approval in Colorado, Idaho, Iowa, Nebraska and North Dakota. This time last year, the rates in those states were staggeringly high, and clearly precluded competitive local entry. In anticipation of its section 271 application, Qwest began reducing its massively inflated rates in Colorado in a state UNE pricing proceeding. And Qwest unilaterally lowered its rates in the other four states – with no corresponding cost proceedings – just *days* before filing the instant Section 271 application.

7. On this record, Qwest recognized that it could not carry its burden of proving that the rates in Idaho, Iowa, Nebraska and North Dakota were TELRIC by pointing to any TELRIC-compliant pricing proceedings. Indeed, some of these states have not held pricing proceedings since 1997, and some of the state-commissions actually explicitly refused to develop rates based on TELRIC principles. And because Qwest's last minute UNE rate reductions in those states were rubber stamped, and not reviewed, by those state commission's Qwest could not prove that those reduced rates are TELRIC compliant.

8. To overcome these obstacles, Qwest implemented an unprecedented strategy. Qwest claims that the Commission should approve the rates in Idaho, Iowa, Nebraska and North Dakota because, Qwest says, those rates satisfy the Commission's benchmarking analysis, using Colorado as the benchmark state. Qwest is wrong. As a preliminary matter, the record in this proceeding demonstrates that Qwest's Colorado rates are not TELRIC compliant and, therefore, cannot be used as a benchmark against which to find that rates in other states are TELRIC compliant. In addition, as I demonstrated in my initial testimony, Qwest's benchmarking analysis is fundamentally flawed. And correcting those errors shows that Qwest's

rates in Iowa, Nebraska and North Dakota do not, in fact, satisfy the Commission's benchmarking analysis.

9. In particular, I demonstrated that Qwest's recurring loop benchmark analysis was flawed because (1) it included high cost exchanges that Qwest no longer owns and (2) it failed to reflect recurring loop rates listed in Qwest's SGAT, including OSS, cross-connect, and grooming rates. I also demonstrated that Qwest's recurring non-loop benchmarking analysis is flawed because it reflected national average minutes for each Qwest state rather than the actual number of minutes in each state. Qwest has responded to some of these clear errors. For example, Qwest is lowering its rates to account for the fact that its initial benchmark analysis reflected the costs of exchanges that Qwest did not actually own. Whether these measures will produce cost-based rates remains to be seen. Other fixes, however, are clearly erroneous. For example, Qwest does not account for OSS charges, rather Qwest reshuffled the deck and moved them to another rate category.

10. *Loop Benchmarking.* In my initial declaration, I demonstrated that Qwest's loop benchmarking analysis was flawed in two general respects. First, that analysis failed to account for exchanges that Qwest did not own. In a recent letter to this Commission, Qwest has promised to address that problem sometime in the next few weeks. *See Qwest July 22 Ex Parte Letter* at 1. I cannot confirm that Qwest has correctly implemented that "fix" until Qwest files new SGATs that reflect those changes.

11. In my initial declaration, I also demonstrated that Qwest's benchmarking analysis failed to reflect recurring loop costs, including recurring costs for OSS, cross-connects, and grooming. Qwest has not agreed to correct this fundamental error. Instead, Qwest argues that these rate elements should not be ignored. Qwest notes that the Commission has in the past

found that daily usage feeds (“DUF”) rates should not be included in a switching benchmark analysis, and claims that this justifies Qwest’s failure to account for recurring OSS, cross-connect and grooming charges. *See Qwest July 22 Ex Parte Letter* at 7. Qwest is wrong. DUF records are not part of the network functionality (DUF records are generally used only for billing and record-keeping purposes); OSS, cross-connects and grooming, in contrast, are network functionalities that must be purchased to obtain a working loop. Thus, there is no question that those rate elements must be included in any valid benchmarking analysis.

12. Qwest’s argument to the contrary is nothing less than a continuation of the anticompetitive recurring and nonrecurring charge shell game that began when Qwest first reduced its rates on the eve of this joint application. As I demonstrate in my initial declaration, Qwest’s reduced loop and switching rates were accompanied by *increases* in other rate elements, as well as the addition of new rate elements. Qwest is now arguing that the Commission should ignore the rate elements that it increased and focus solely on rates that it reduced. The Commission should not allow Qwest to game the Commission’s benchmarking short cut. To the extent that the Commission allows Qwest to avoid scrutiny of its rates in Idaho, Iowa, Nebraska and North Dakota by benchmarking those rates against Colorado rates, the Commission must insist that Qwest account for *all* loop-related elements, and not just those that Qwest has reduced in order to gain Section 271 approval.

13. Qwest also argues that the Commission should exclude the recurring OSS rate from the benchmark analysis because, according to Qwest, the OSS rate is a non-recurring charge, not a recurring charge. *See Qwest July 22 Ex Parte Letter* at 7. Qwest’s SGAT expressly lists the OSS rate as a *recurring rate element*, not as a non-recurring rate element. And even if Qwest files another eleventh hour SGAT amendment to re-label the OSS rate as a non-

recurring rate, Qwest bears the burden of proving that its OSS costs are in fact appropriately recovered as a one-time expense, and that the new NRC is TELRIC-compliant. Moreover, Qwest must explain why such NRCs are appropriate in some of its states, but not in others.

14. Qwest also claims that its recurring grooming rates should be excluded from the benchmarking analysis because those charges are difficult to measure. That is nonsense. As an initial matter, if Qwest believes that accounting for all relevant charges in a benchmarking analysis is too difficult, then it must eschew the benchmarking short cut and defend the non-Colorado rates on their merits. In any event, it is not, in reality, difficult to measure those costs. In Colorado, grooming rates apply only to lines served by integrated digital loop carrier. My benchmarking analysis accounted for that fact by computing the total grooming charges that would apply based on the number of lines currently served by integrated digital loop carrier in Qwest's network (As reported by Qwest in Qwest's web-based ICONN database). In Nebraska and North Dakota, grooming rates apply to all lines, and I computed grooming rates accordingly. Thus, my analysis accounts for the fact that the application of grooming rates varies from state-to-state.

15. As I demonstrated in my initial testimony, correcting for all of these errors in Qwest's analysis confirms that Qwest's loop rates in Iowa, North Dakota and Nebraska are higher than those in Colorado on a cost-adjusted basis, by 12%, 31% and 13%, respectively. And Qwest's UNE-L loop rates in those states exceed Colorado's UNE-L loop rates on a cost-adjusted basis by 9%, 35%, and 17%, respectively.

16. *Non-Loop Benchmarking.* As I demonstrated in my initial testimony, Qwest's non-loop rates in Iowa, Nebraska and North Dakota also fail the Commission's benchmarking rules, because Qwest's comparisons improperly rely upon national average

“minutes of use” that do not reflect the relevant actual minutes of use for each state. Because Qwest’s non-loop benchmarking analysis starts with the “wrong” number of minutes – which even Qwest concedes drives the results of its benchmarking analysis – Qwest’s analysis ends with the wrong benchmark results.

17. State-specific minutes of use are publicly available from Qwest’s ARMIS reports. Qwest points out that benchmarking comparisons require that the ARMIS data be divided between interoffice and intraoffice minutes, and notes that the state-specific data showing the proper allocation of those minutes has not been made publicly available by Qwest. *See Qwest July 22 Ex Parte Letter* at 3. Because AT&T and WorldCom do not have access to Qwest’s state-specific interoffice vs. intraoffice minutes of use allocations, Qwest contends that AT&T’s and WorldCom’s benchmarking analyses – which use state-specific total minutes and estimated state specific intraoffice/interoffice allocations – are imperfect. The Commission has no choice in these circumstances, Qwest contends, but to rely upon Qwest’s national average-based comparisons. That argument makes no sense.

18. Qwest’s argument is absurd and ignores the fact that it is *Qwest’s* burden to establish that its rates in the other states compare favorably to its benchmark state on a cost-adjusted basis. If Qwest chooses not to supply the Commission and the parties with the allocation data that it possesses, then it cannot take advantage of the benchmarking shortcut. And if benchmarking is to be done in the face of Qwest’s refusal to provide the actual allocation data, reasoned decision making and the Commission’s own decisions require that it be done on the basis of the best available state-specific information.

19. As the Commission has explained, “UNE rates are set by state commissions based on state-specific costs divided by total demand. The UNE rates therefore

necessarily reflect state-specific MOU and traffic assumptions. Use of state-specific MOU per-line and traffic assumptions to develop per-line per-month UNE-platform prices for a benchmark state and an applicant states is therefore consistent with the manner in which states establish the UNE-Platform rates.” See *New Jersey 271 Order* ¶ 53.

20. The fact that Qwest has not made its state-specific interoffice/intraoffice minutes allocations available for the purposes of conducting a fully state-specific benchmarking analysis certainly does not compel the conclusion that a better approach is to abandon *all* state-specific minutes of use data, and base the benchmarking approach on national minutes of use assumptions and national interoffice/intraoffice minutes allocations that are necessarily wrong. On the contrary, to the extent that non-state-specific assumptions are necessary under either approach, common sense and basic mathematics dictate that a benchmarking analysis, which starts with state-specific total minutes of use, would more accurately reflect relative costs than an analysis that relies on neither state-specific total minutes, nor state-specific interoffice/intraoffice allocations.¹ The Commission’s benchmarking analysis is a short cut to assessing whether rates in an applicant state were developed using TELRIC principles. It is imperative that this short cut benchmarking approach be applied consistently and accurately to ensure that cannot be used to approve rates that are plainly inflated far above those that would be produced by any reasonable application of TELRIC principles.

21. Qwest attempts to justify its use of national average minutes in its benchmarking analysis on the grounds that in some cases, the national average minutes data

¹ Qwest also claims that the fact that AT&T’s and WorldCom’s benchmarking analysis fails to reflect state-specific allocations of minutes between originating and terminating calls, and between calls to an access tandem and calls direct to a POP. In reality, those allocations have little, if any, impact on the results of the benchmark analysis. As the Qwest states have identical rates for originating and terminating, the originating vs. terminating splits are not material for benchmarking purposes. Qwest should have state-specific tandem allocations for interLATA categories – it annually file tandem use for interstate in TRPs. The tandem allocation, however, does not have a large effect on benchmarking.

produce greater state-to-state cost-adjusted rate differences than would be produced by the state-specific data, and in other cases, the national average minutes data produce lower state-to-state cost-adjusted rate differences than produced by the state-specific data. *See Qwest July 22 Ex Parte Letter* at 3-5. Qwest also points out that the relative difference in the national average and state-specific benchmarking analysis may vary from year to year (because the total number of minutes varies from year to year). *See id.* But the concern with such random results is precisely why the more accurate state-specific data must be used. It would permit an RBOC to choose whichever data is most beneficial with respect to the particular states at the particular time(s) that the RBOC chooses to file section 271 applications. Clearly, the Commission's standards require more precision and objectivity. The results oriented approach advocated by Qwest would do little more than permit Qwest to game the process by avoiding careful scrutiny of rates. And Qwest has clearly employed such gamesmanship here. Using state-specific minutes-of-use, and state-specific estimates for the allocation of those minutes shows that Qwest's Iowa, Nebraska and North Dakota non-loop rates fail the Commission's benchmarking analysis. On the other hand, Qwest's non-loop benchmarking analysis – which is based on national minutes – results in distinctly more favorable results for Qwest.

22. Qwest's false claim that the use of national average minutes to conduct a benchmarking analysis does not benefit Qwest also is irrelevant (in addition to being patently false). The purpose of the Commission's benchmarking analysis is to determine whether rates in a particular state are within some reasonable range of the rates in another state. The proper methodology for conducting that analysis does not depend on whether one methodology systematically produces higher or lower results than a competing methodology. Rather, the proper methodology is that which systematically produces the most accurate results. And as

explained by AT&T, and as recognized by this Commission in the *New Jersey 271 Order* (§ 53), the most accurate benchmarking analysis is that which is based on state-specific minutes, and if necessary, state-specific assumptions relating to the allocation of those minutes.

23. The bottom line is this: a properly conducted benchmarking analysis – using state-specific total minutes and best estimates of how those minutes are allocated – confirms that Qwest's switching rates in Iowa, Nebraska and North Dakota fail the Commission's benchmarking analysis. Qwest's non-loop rates in those states exceed those in Colorado by 4%, 48%, and 12%, respectively. Thus, contrary to Qwest's claims, its non-loop rates in those states do not satisfy the Commission's benchmarking analysis.

II. QWEST'S UNE RATES CREATE A DISCRIMINATORY "PRICE SQUEEZE."

24. As I explained in my initial declaration, even aside from the problems discussed above, there is separate and independent evidence that the UNE rates in Idaho, Iowa and North Dakota are discriminatory. Accounting for all possible potential revenues that may be available to new entrants – including interLATA toll contributions, IntraLATA toll contributions, and state and federal universal service revenues – revenues are not sufficient to cover an efficient new entrant's costs in those states. Moreover, even accounting for possible entry strategies that include a mix of UNE-based services and resale service, the gross margins available to new entrants are insufficient to support competitive local telephone entry. Indeed, after accounting for an efficient entrant's internal costs of entry, the net margins that are available to new entrants in Iowa, Idaho, and North Dakota are *negative*. Thus, Qwest's UNE rates in Idaho, Iowa, and North Dakota are discriminatory in violation of Checklist Item 2.

25. Qwest advances a scattershot of baseless criticisms against my margin analysis. None has merit. First, Qwest asserts that my analysis improperly reflects Qwest's OSS rate as a recurring rate and not as a non-recurring rate. But as explained above, Qwest's OSS rate

is currently listed in Qwest's SGATs as a recurring rate. In the event that Qwest files a new SGAT with OSS removed from the recurring loop rate and placed as a non-recurring charge, it would then make sense to reflect Qwest's OSS rate as a non-recurring charge and not as a recurring charge.

26. Second, Qwest claims that my margin analysis fails to account for the fact that NRCs can be passed on to customers. But that argument ignores the current competitive environment, in which Qwest currently serves virtually all local residential customers, and new entrants must convince existing Qwest residential customers to switch carriers. In this environment, it is difficult for CLECs to win customers who are faced with paying significant costs as a result of switching services: it would be unrealistic to assume that residential customers are willing to pay large up-front charges for the privilege of switching service. A business plan that charges residential customers a large up-front charge for making switch is not economically viable because customers will not pay for the privilege of switching to a new carrier. Nor is it economically feasible for a CLEC to increase local rates to recover NRCs. CLEC rates are effectively capped by the rates charged by the incumbent LEC because customers will not switch to a new entrant that is charging higher rates. As a result, CLECs must recover NRCs through local rates, that are no higher than those charged by incumbent LECs. AT&T's margin analysis correctly reflects that reality.

27. Third, Qwest claims that AT&T's access revenue estimates are too low. Those access revenues are based on actual observed average toll-related MOU from TNS Telecoms Bill Harvest market research. Qwest does not challenge the accuracy of the inputs to the calculation. Instead, Qwest asserts that AT&T's access revenues are too high because they are higher than Qwest's estimates. The primary reason that Qwest's estimates are higher than

AT&T's estimates, however, is that Qwest's analysis relies on improper minutes of use values in its computation of access revenues. It appears from *Qwest July 22 Ex Parte Letter* that Qwest's margin analysis relies on a combination of residential and business minutes, which is clearly improper for a residential-only margin analysis.

28. Fourth, Qwest claims that my analysis is flawed because it computes margins based on state-specific data. That argument is specious. The purpose of a margin analysis is to determine whether entry is economically feasible in a particular state. To make that determination, it is necessary to account for the actual conditions in that state, including the actual number of minutes in that state. A proper margin analysis – like the analysis performed by AT&T – therefore must reflect state-specific minutes. Because my margin analysis is focused on the residential market, the minutes of use reflected in my analysis reflect state-specific minutes of use.

29. Fifth, Qwest claims that the residential line weightings used in AT&T's analysis are undisclosed. In fact, the line weightings used in AT&T's margin analysis are those reported by Qwest in Qwest's web-based ICONN database (available at <http://www.uswest.com/cgi-bin/iconn>).

30. Sixth, Qwest claims that my analysis fails to account for the possibility that new entrants will find higher margins by offering a mix of residential Total Services Resale and UNE-P. Qwest is wrong. My analysis computed both the UNE-P margins and the resale margins that are available to new entrants in each zone. My statewide margin figures are based on the higher of the two margins (the UNE-P and resale margins) that are available to new entrants in each zone.

31. Seventh, Qwest claims that AT&T's stated internal costs of more than \$10.00 are not supported. That claim also is false. The declaration of Steven Bickley explains in detail how the \$10.00 figure was computed. Furthermore, Mr. Bickley demonstrated that the \$10.00 plus estimate is not based on AT&T's actual internal costs, but is based on (lower) projected figures that AT&T seeks to achieve in the future and that are a reasonable estimate of an efficient carrier's internal costs.

32. The bottom line is this: notwithstanding Qwest's baseless claims to the contrary, a proper margin analysis shows that local entry is not economically feasible in Idaho, Iowa and North Dakota.

III. THE SWITCHING RATES PRODUCED BY THE HAI COST MODEL REFLECT THE COST OF VERTICAL FEATURES.

33. As explained in the declaration of Robert Mercer and Richard Chandler, Qwest's Colorado switching rates include a separate charge for vertical features. That is a clear TELRIC error because the HAI cost model – on which Qwest's Colorado switching rates are based – already reflect the cost of vertical features. Thus, Qwest's additional separate vertical features charge double-recovers the cost of vertical features.

34. Qwest's claims that switching rates produced by the HAI cost model in Colorado do not reflect vertical features costs is based on an internally inconsistent accounting argument. To see this inconsistency, it is first important to understand how the HAI cost model accounts for the costs of vertical features. Qwest correctly recognizes that the switch investments used by the HAI model are based on an FCC cost study of actual switching investments prior to 1997. Qwest then goes on to make a false statement: "The cost of applications software (which is used to provide vertical features) has never been accounted for as a digital switch investment."

35. The data used by the Commission's cost study reflects, among other accounts, the "operating expenses" account of incumbent LECs and independent operating companies. And, as Qwest concedes, "Verizon and most other ILECs accounted for the cost of installing applications software (*i.e.*, vertical features software) or other recurring operating costs associated with vertical features as operating expenses prior to 1999." *See Qwest July 22 Ex Parte Letter* at 13. Thus, there is no question that the accounts used to develop switching investment for use in the HAI model reflect the cost of vertical features upgrades.²

36. Qwest's entire argument that the costs of vertical features software and upgrades are not reflected in the Colorado switching rates produced by the HAI model rests on its assertion that Qwest, unlike all of the other incumbent LECs, did not include the cost of vertical features upgrades in its operating expenses prior to 1999. *See Qwest July 22 Ex Parte Letter* at 13. There are two fundamental problems with Qwest's argument.

37. First, even if it is true that Qwest did not include the costs of vertical features upgrades in its operating expense accounts prior to 1999 (and therefore are not reflected

² In the course of developing the switch cost related inputs for the Commission's Synthesis Model (the HAI model uses the switching inputs used by the Synthesis Model), the outcome of which is documented in the Commission's Inputs Order, the Commission developed parameters to account for both capital and operating expense related cost.

The capital cost parameters were estimated by the Commission staff statisticians using two sets of pre-1998 data: a sample of RUS switch purchase data and a larger depreciation study of embedded switch investment data of larger carriers. The datasets were combined and, as part of a multilinear regression analysis, three national coefficients were estimated that were used in the synthesis model: 1) getting started cost for remotes, 2) getting started costs for non-remotes, and 3) a per line cost common to all switches. Because vertical feature software purchased with new switches would have been capitalized and reflected in the switch investment data, the estimated parameters would likewise reflect the cost of the vertical features purchased with the new switches for all companies.

The operating expense parameter is an expense to investment ratio (E:I ratio) which is used to derive an operating expense cost for a particular plant investment account, in this case switching (2212), and to translate that account to an expense figure reflecting the maintenance cost (in this case, 6212). The Commission collected the ARMIS investment and operating expense data for 1998 and through a special data request, *i.e.*, current to book ratios for the investment accounts. The Commission calculated the E:I ratios by adjusting the embedded investment data by the current to book ratios and then dividing the resultant investment into the operating expense data. The Commission created a single national set of E:I ratios for each plant account used by the Commission's Synthesis Model.

The HAI model uses the switching E:I ratio and the switch investment coefficients from the Commission's Synthesis Model regression analysis to first estimate HAI switching investment and secondly, based upon the switch

in the Commission switch expense data for Qwest), that does not mean that the HAI model does not account for those costs at all. On the contrary, the switch expense data relied on by the HAI model (and the Commission's E:I ratio) reflects the switching expense figures of a broad mix of incumbent non-rural LECs (both RBOCs and independent operating companies), and Qwest's switching expense comprises only a small fraction of that data. Because the switch expense figures reported by the numerous other companies did include the costs of switch upgrades, *see id.* at 13, Qwest's failure to report that information had only a *de minimus* impact on that results. Thus, there is no question that the HAI cost study reflects the cost of switch upgrades, and Qwest's attempt to implement another vertical features charge that would recover Qwest's full switch upgrade costs would double-recover those costs.

38. Second, Qwest's argument is misleading. Qwest asserts first that the HAI model does not reflect the costs of initially installing feature software or feature software upgrades. Initially, Qwest erroneously alleges that vertical feature software was never accounted for as digital switch investment, even for initial investment. Qwest makes no statement as to how, prior to 1999, it accounted for feature software purchased with the new switch (Qwest only discusses how its accounting practices changed with respect to vertical features software upgrades). It is my understanding that common practice, prior to the accounting change in 1999, was that feature software purchased along with a new switch was capitalized. Qwest does not ultimately provide any legitimate evidence that the HAI model does not reflect the costs of initially installing vertical features software. That is because, as explained above, the HAI model does reflect those costs. Moreover, as detailed above, Qwest's purported evidence that the HAI model does not reflect the cost of switch *upgrades* is specious.

investment (which reflects the feature cost) creates corresponding maintenance expense by multiplying the calculated investment by the E:I ratio.

IV. CONCLUSION

39. For the foregoing reasons Qwest's claims that its rates in Colorado, Idaho, Iowa, Nebraska and South Dakota are TELRIC-compliant must be rejected.

VERIFICATION PAGE

I declare under penalty of perjury that the foregoing Declaration is true and correct.

/s/ Michael Lieberman

Michael Lieberman

Executed on: July 29, 2002